

## EAST Search History

### EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	38	(US-20010013509-\$ or US-20040050829-\$). did. or (US-5001324-\$ or US-4806728-\$ or US- 4324972-\$ or US-5104032-\$ or US-6914213-\$ or US-6087625-\$ or US-5451742-\$ or US- 5454480-\$ or US-5626776-\$ or US-5889253-\$ or US-4642446-\$ or US-6646225-\$ or US- 6479168-\$ or US-5897796-\$ or US-6576864-\$ or US-6344626-\$ or US-5131710-\$ or US- 4873415-\$ or US-5187346-\$ or US-7385157-\$ or US-6596961-\$ or US-5059759-\$ or US- RE29815-\$ or US-5760365-\$ or US-4737612-\$ or US-6972393-\$).did. or (US-6875951-\$ or US- 7123632-\$ or US-5434880-\$ or US-6329635-\$ or US-6075220-\$ or US-5061841-\$ or US- 4595820-\$).did. or (JP-2002178178-\$).did. or (DE-4407190-\$ or WO-9908829-\$).did.	US-PGPUB; USPAT; JPO; DERWENT	OR	OFF	2010/07/29 11:45
L2	10	L1 and (inner or inward)	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:48
L3	1504	219/121.64.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/29 11:49
L4	3908	inward\$4 and narrow\$4 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:50
L5	5	(inward\$4 near narrow\$4) and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:50
L6	8523	spiral\$4 and laser and weld\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:52

L7	4386	(spiral\$4 and pattern) and laser and weld\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:52
L8	127	L7 and "219".clas.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:52
L9	312	L6 and "219".clas.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:53
L10	8594	(spiral\$4 or trepan\$5) and laser and weld\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:56
L11	329	L10 and "219".clas.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 11:56
L12	1136	219/121.73	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:08
L13	615	219/121.73.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:08
L14	18	L13 and spiral\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:08
L15	46	("4118109"   "4467170"   "4733944"   "4923772"   "4940881"   "5160823"   "5298351"   "5378137"   "5414559"   "5467115"   "5609778"   "5610733"   "5841101"   "5905020"   "5912467"   "5997134"   "6008468").PN. OR ("6313435"). URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:10
L16	0	L15 and spiral\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:11
L17	9	inward\$4 and (narrow\$4 near spiral\$4) and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:12
L18	0	inward\$4 and (narrow\$4 near spiral\$4) and laser	DERWENT	OR	OFF	2010/07/29 12:20
L19	1	(narrow\$4 near spiral\$4) and laser	DERWENT	OR	OFF	2010/07/29 12:20

L20	1	"05042337"	DERWENT	OR	OFF	2010/07/29 12:21
L21	0	427/508.ccls.	DERWENT	OR	OFF	2010/07/29 12:32
L22	1013	427/508.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:32
L23	0	L2 and spiral\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:32
L24	38	L22 and spiral\$4	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:32
L25	17	L22 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 12:33
L26	1002	427/553.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:08
L27	20	L26 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:08
L28	588	427/554.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:10
L29	32	L28 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:10
L30	253	427/586.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:11
L31	8	L30 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:11
L32	933	427/596.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:11
L33	45	L32 and spiral\$4 and laser	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/29 13:11
S1	706	(219/121.67).CCLS.	USPAT; USOCR	OR	OFF	2008/09/02 16:35

S2	43	S1 and SCANNER	US_PGPUB; USPAT	OR	ON	2008/09/02 16:39
S3	1047	(219/121.63).CCLS.	US_PGPUB; USPAT; USOCR	OR	OFF	2008/09/02 16:40
S4	49	S3 and scanner	US_PGPUB; USPAT	OR	ON	2008/09/02 16:40
S5	0	"10169480"	US_PGPUB; USPAT	OR	ON	2008/09/02 16:50
S6	1	"20030132210"	US_PGPUB; USPAT	OR	ON	2008/09/02 16:50
S7	1	"5104032".pn.	US_PGPUB; USPAT	OR	ON	2008/09/03 07:46
S8	7	"4407190"	US_PGPUB; USPAT; DERWENT	OR	ON	2008/09/03 07:52
S9	0	wo9523670	US_PGPUB; USPAT; DERWENT	OR	ON	2008/09/03 08:10
S10	0	wo9523670	US_PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/09/03 08:10
S13	0	"10470929"	US_PGPUB; USPAT; USOCR	OR	ON	2008/09/03 08:16
S14	6	"470929".ap.	US_PGPUB; USPAT; USOCR	OR	ON	2008/09/03 08:17
S15	1	"5454480".pn.	US_PGPUB; USPAT; USOCR	OR	ON	2008/09/03 08:19
S16	2	10/491909	US_PGPUB; USPAT	OR	ON	2008/09/03 08:28

S17	1047	(219/121.63).OCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/03 08:51
S18	1047	(219/121.63).OCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/09/03 13:35
S20	951	S18 and @ad<"20050926"	US-PGPUB; USPAT	OR	ON	2008/09/03 13:36
S21	1	"10526989"	US-PGPUB; USPAT	OR	ON	2008/09/03 13:43
S22	8154	Zauner.in. Reiniger.in. Becker.in. Goth.in. Paelmer.in.	US-PGPUB; USPAT	OR	ON	2008/09/03 13:45
S23	0	(Daniel adj Zauner).in. (Claus adj2 Reiniger). in. (Wolfgang adj Becker).in. (Klaus adj Goth). in. (Mike adj Paelmer).in.	US-PGPUB; USPAT	OR	ON	2008/09/03 13:46
S24	16	"6087625"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:16
S26	0	DE4407190	DERWENT	OR	ON	2008/09/23 14:23
S27	2	"4407190"	DERWENT	OR	ON	2008/09/23 14:24
S28	11	"5451742"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:27
S29	14	"5626776"	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:41
S30	0	("laserandmachiningandsheets").PN.	USPAT; USOCR	OR	OFF	2008/09/23 14:43
S31	38818	laser and machin\$4 and coated and sheets	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:44
S32	667055	protuberance bump extrusion protrusion bulge	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:46
S33	847887	melt\$3 liquify\$3	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:48

S34	221702	scanner (scanning near device)	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:49
S35	13129	S31 and S32	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:49
S36	8382	S31 and S32 and S33	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:49
S37	1264	S31 and S32 and S33 and S34	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:49
S38	1805409	spiral circular or circle	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:50
S39	857	S31 and S32 and S33 and S34 and S38	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:50
S40	199	S31 and S32 and S33 and S34 and S38 and weld\$3	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:52
S41	705	(219/121.67).CCLS.	USPAT; USOCR	OR	OFF	2008/09/23 14:54
S42	0	("l18andcoated").PN.	USPAT; USOCR	OR	OFF	2008/09/23 14:54
S43	133	S41 and coated	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 14:54
S44	476	228/173.6.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:10
S45	28	S44 and laser	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:11
S46	0	219/121.6.ccls	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:15
S47	1124	219/121.6.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:16
S48	1021	S47 and laser	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:16

S49	3	S47 and protuberance	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:16
S50	23	"4642446"	US-PGPUB; USPAT; DERWENT	OR	ON	2008/09/23 15:53
S51	23	("3798406"   "3969604"   "4416737"   "4480166").PN. OR ("4642446").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 15:59
S52	38	("4642446"   "4654505"   "4661677"   "4682002"   "4719689"   "4758704"   "4833295"   "4873415"   "4901555"   "4906812"   "4916284"   "4945489"   "5115115"   "5125780"   "5131710"   "5142118"   "5237734"   "5347528"   "5380978"   "5451742"   "5539180"   "5591358").PN. OR ("5897796").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 16:09
S53	1309	219/121.64.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 16:47
S55	1092	S53 and laser and welding	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 16:48
S56	745	219/121.82.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/23 17:02
S57	745	219/121.82.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/24 07:05
S58	662	S57 and laser	US-PGPUB; USPAT	OR	ON	2008/09/24 07:05
S59	16	"6087625"	US-PGPUB; USPAT	OR	ON	2008/09/24 07:07
S60	38818	laser and machin\$4 and coated and sheets	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/24 13:45
S61	32	S60 and (focused near above)	US-PGPUB; USPAT	OR	ON	2008/09/24 13:45

S62	1309	219/121.64.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/24 13:47
S63	1298	S62 or S57 and (focus\$3 near above)	US-PGPUB; USPAT	OR	ON	2008/09/24 13:48
S64	30	(S62 or S57) and (focus\$3 near above)	US-PGPUB; USPAT	OR	ON	2008/09/24 13:48
S65	19	("3925785"   "4504727"   "5227607"   "5293389"   "5498851"   "5786560").PN. OR ("6087625").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/09/24 14:06
S66	2	"2002178178"	JPO; DERWENT	OR	ON	2008/09/24 14:45
S67	9	"9800779"	DERWENT	OR	ON	2008/09/25 09:39
S68	2	"9908829"	DERWENT	OR	ON	2008/09/25 09:39
S69	1564	Laser and "acousto-optical Modulators"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2008/09/25 09:43
S70	32	Laser and "acousto-optical Modulators" and weld\$3	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2008/09/25 09:43
S71	2	"9908829"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2008/09/25 09:47
S72	3	"9908829"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:47

S73	13	"1003624"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:48
S74	0	Laser and welding and penetration adj5 sens* 3	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:50
S77	41	Laser and weld\$4 and ((penetration adj5 sens* 3) or depth adj sens\$3)	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:51
S80	6135	(Laser and welding and ((penetration adj5 sens* 3) or depth)) and @py< "2004"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:57
S82	6146	(Laser and welding and ((penetration adj5 (sens* 3 or measur\$6)) or depth)) and @py< "2004"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 09:59
S83	9	S82 not S80	US-PGPUB; USPAT	OR	ON	2008/09/25 10:00
S84	51	(Laser and welding and (penetration adj5 (sens* 3 or measur\$6))) and @py< "2004"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2008/09/25 10:01
S85	2	2000-301374	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2008/09/25 11:56
S86	0	jp2000301374	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2008/09/25 11:56

S87	3	"2000301374"	US-PGPUB; USPAT; JPO; DERWENT	OR	ON	2008/09/25 11:56
S88	1	"20010045419"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/13 09:41
S89	1062	219/121.63.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/13 10:01
S90	49	S89 and scanner	US-PGPUB; USPAT	OR	ON	2009/02/13 10:02
S91	897	219/121.67.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/13 10:02
S92	1610	Laser and "acousto-optical Modulators"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/02/13 10:03
S93	1344	219/121.64.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/13 10:03
S94	749	219/121.82.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/13 10:04
S95	1144	219/121.6.ccls.	US-PCPUB; USPAT; USOCR	OR	ON	2009/02/13 10:04
S96	42106	laser and machin\$4 and coated and sheets	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08
S97	706080	protuberance bump extrusion protrusion bulge	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08
S98	883563	melt\$3 liquify\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08
S99	242581	scanner (scanning near device)	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08
S100	1883689	spiral circular or circle	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08

S101	225	S96 and S97 and S98 and S99 and S100 and weld\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:08
S102	754	219/121.82.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:09
S103	671	S102 and laser	US-PGPUB; USPAT	OR	ON	2009/06/08 11:09
S104	51	(Laser and welding and (penetration adj5 (sens* 3 or measur\$6))) and @py< "2004"	US-PGPUB; USPAT; USOCR; EPO; DERWENT	OR	ON	2009/06/08 11:09
S105	923	219/121.67.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/06/08 11:09
S106	315	S105 and laser and sheet and surface	US-PGPUB; USPAT; USOCR	OR	OFF	2009/06/08 11:10
S107	1368	219/121.64.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/06/08 11:10
S108	30	(S107 or S102) and (focus\$3 near above)	US-PGPUB; USPAT	OR	ON	2009/06/08 11:10
S109	15	"5760365"	US-PGPUB; USPAT	OR	ON	2009/06/08 11:51
S110	1	"10562989"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/22 17:46
S111	1	"10526989"	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/22 17:48
S112	44451	laser and machin\$4 and coated and sheets	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S113	735428	protuberance bump extrusion protrusion bulge	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S114	910222	melt\$3 liquify\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40

S115	258252	scanner (scanning near device)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S116	1942568	spiral circular or circle	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S117	241	S112 and S113 and S114 and S115 and S116 and weld\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S118	44451	laser and machin\$4 and coated and sheets	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S119	735428	protuberance bump extrusion protrusion bulge	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S120	910222	melt\$3 liquify\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S121	258252	scanner (scanning near device)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S122	1942568	spiral circular or circle	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S123	241	S118 and S119 and S120 and S121 and S122 and weld\$3	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/23 11:40
S124	966	219/121.67.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/23 11:41
S125	1118	219/121.63.ccls.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/23 11:42

7/29/2010 1:15:10 PM

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